



InfoBrief

Federal Obligations for R&D to Private Nonprofit Institutions Totaled \$8.3 Billion in FY 2019

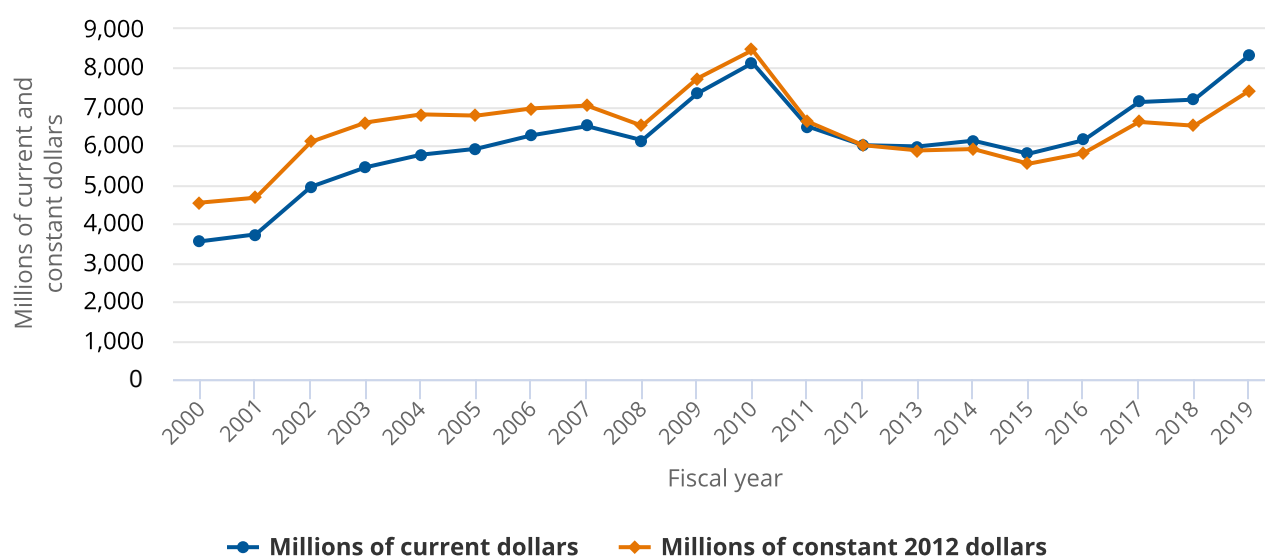
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In FY 2019, federal agency obligations to nonprofit institutions for research and development totaled \$8.3 billion,¹ surpassing the previous high of \$8.1 billion set in FY 2010 when many agencies' obligations included an infusion of funds from the American Recovery and Reinvestment Act of 2009 ([figure 1](#)). On a current dollar basis, federal agency obligations for R&D to nonprofit institutions increased 135% in FY 2019 from \$3.5 billion in FY 2000. When adjusted for inflation, FY 2019 obligations for R&D totaled \$7.4 billion, an increase of 63% from \$4.5 billion in FY 2000. However, when compared to FY 2010, federal obligations to private nonprofit institutions decreased 12% from the FY 2010 high of \$8.5 billion. Analysis of federal obligations to nonprofit R&D helps policymakers and stakeholders monitor changes to an important source of nonprofit R&D funding.

Figure 1

Federal obligations for research and development to nonprofit institutions: FYs 2000–19



Note(s):

Detail may not add to total because of rounding. FY 2009 and FY 2010 include obligations from the American Recovery and Reinvestment Act of 2009.

Source(s):

National Center for Science and Engineering Statistics, Survey of Federal Science and Engineering Support to Universities, Colleges, and Nonprofit Institutions.

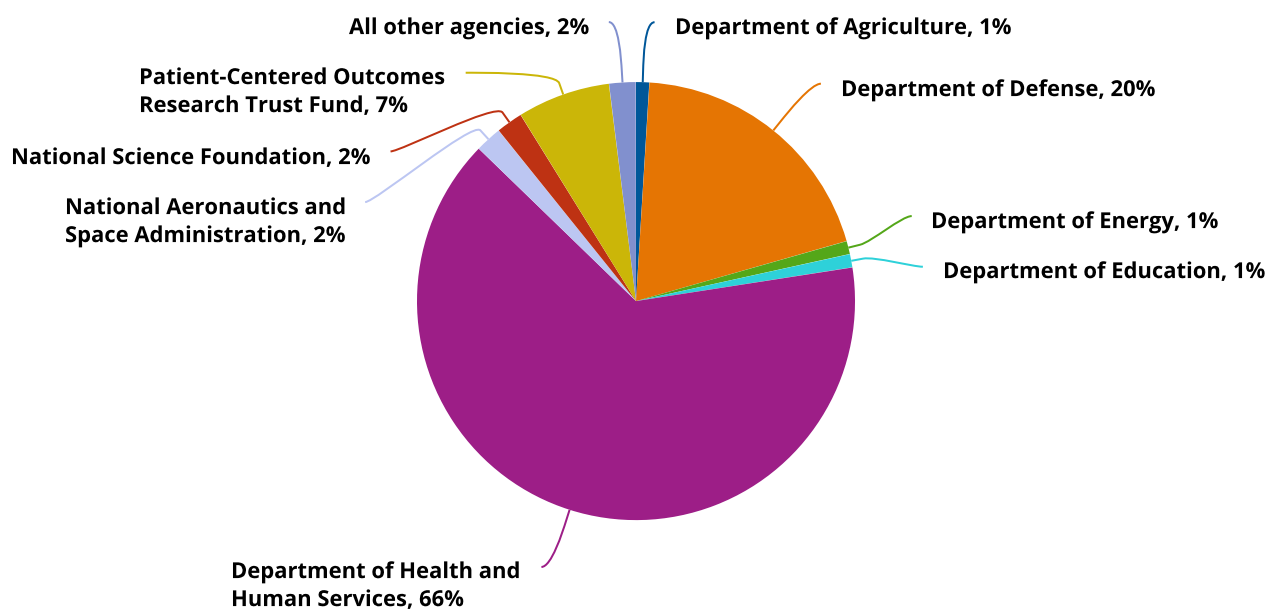
These and other estimates in this InfoBrief are from the FY 2019 [Survey of Federal Science and Engineering Support to Universities, Colleges, and Nonprofit Institutions](#) (Federal S&E Support Survey), conducted by the National Center for Science and Engineering Statistics (NCSES) within the National Science Foundation (NSF).

Federal Agencies' R&D Obligations to Nonprofit Institutions

In FY 2019, the Department of Health and Human Services (HHS) and the Department of Defense (DOD) combined account for over 85% of all federal R&D obligations to nonprofit institutions ([figure 2](#)). HHS, which includes the National Institutes of Health, provided the largest share (66%) of all federal obligation for R&D to nonprofits with \$5.5 billion, followed by DOD with 20% (\$1.6 billion). Obligations from the Patient-Centered Outcomes Research Trust Fund (PCORTF), managed by the Department of the Treasury,² accounted for nearly 7% (\$578 million) of all federal obligations to nonprofits. These were followed by NSF and the National Aeronautics and Space Administration, with each accounting for 2%, while the Department of Agriculture, Department of Energy, and Department of Education each contributed about 1%.

Figure 2

Federal obligations for research and development to all nonprofit institutions, by agency: FY 2019

**Note(s):**

Percentages do not add to 100% due to rounding.

Source(s):

National Center for Science and Engineering Statistics, Survey of Federal Science and Engineering Support to Universities, Colleges, and Nonprofit Institutions, FY 2019.

Individual Nonprofit Institution Recipients

In FY 2019, 25 nonprofit institutions accounted for 60% of all federal R&D obligations to the nonprofit sector ([table 1](#)). Most of these nonprofit institutions are engaged in medical and biological sciences. Thus, not only are the majority of federal obligations for R&D to nonprofit institutions highly concentrated in terms of the research focus (i.e., medical and biological), but they are also highly centralized in that a majority of funding goes to a relatively small number of recipients. Since approximately 21 of these 25 institutions perform some amount of research in medical and biological science,³ it is not surprising that HHS was the primary funder to these nonprofit institutions at \$3.3 billion. However, it is interesting to note that DOD was the second-largest funder with \$1.0 billion in R&D obligations to these same 25 organizations.

Table 1

Federal obligations for research and experimental development to nonprofit institutions, ranked by total amount received, by agency: FY 2019

(Thousands of current dollars)

Institution name	All agencies	DOD	DOE	ED	HHS	NASA	NSF	USDA	All other agencies ^a
All nonprofit institutions	8,328,518	1,642,656	113,114	46,460	5,452,631	123,597	195,993	46,714	707,355
Patient-Centered Outcomes Research Institute ^b	578,430	0	0	0	0	0	0	0	578,430
Massachusetts General Hospital	515,859	28,289	0	0	487,202	0	367	0	0
Henry M. Jackson Foundation for the Advancement of Military Medicine	367,818	345,252	0	0	22,566	0	0	0	0
Brigham and Women's Hospital	342,920	16,173	0	0	323,784	573	450	0	1,940
Mayo Clinic	317,063	30,067	0	0	286,846	0	150	0	0
Fred Hutchinson Cancer Research Center	304,242	7,377	0	0	295,659	0	1,206	0	0
Children's Hospital Corp.	210,514	21,716	0	0	188,363	0	435	0	0
Battelle Memorial Institute, all locations	191,299	149,232	22,453	0	17,509	65	74	0	1,966
Children's Hospital of Philadelphia	190,918	2,247	0	2,159	186,022	0	285	180	25
SRI International	177,145	112,885	0	3,692	50,202	0	10,365	0	0
Memorial Sloan Kettering Cancer Center	172,559	9,764	0	0	162,540	0	255	0	0
Dana-Farber Cancer Institute	166,232	10,968	0	0	155,127	0	137	0	0
Cincinnati Children's Hospital Medical Center	163,840	1,371	0	722	161,748	0	0	0	0
National Center for Manufacturing Sciences Inc.	160,241	160,241	0	0	0	0	0	0	0
Broad Institute	143,299	2,535	0	0	140,564	200	0	0	0
Research Triangle Institute	134,922	14,516	0	1,295	117,927	629	342	0	213
Beth Israel Deaconess Medical Center, Boston	130,348	1,486	0	0	128,862	0	0	0	0
St. Jude Children's Research Hospital	100,357	0	0	0	100,357	0	0	0	0
Kaiser Permanente	99,253	0	0	0	99,253	0	0	0	0
Cedars-Sinai Medical Center	95,165	24,279	0	0	70,886	0	0	0	0
Seattle Children's Hospital, Research, and Foundation	91,364	0	0	0	91,003	0	361	0	0
Salk Institute for Biological Studies	79,275	4,185	0	0	74,311	0	780	0	0
Jackson Laboratory	77,755	851	0	0	76,447	0	457	0	0
Logistics Management Institute	73,441	72,811	0	0	0	630	0	0	0
City of Hope, Beckman Research Institute	73,066	5,489	0	0	67,576	0	0	0	0
All other nonprofit institutions	3,371,194	620,922	90,661	38,591	2,147,877	121,500	180,328	46,534	124,781

DOD = Department of Defense; DOE = Department of Energy; ED = Department of Education; HHS = Department of Health and Human Services; NASA = National Aeronautics and Space Administration; NSF = National Science Foundation; USDA = Department of Agriculture.

^a Includes obligations from the following agencies: Appalachian Regional Commission, Department of Commerce, Department of Housing and Urban Development, Department of the Interior, Department of Justice, Department of Transportation, Environmental Protection Agency, Nuclear Regulatory Commission, Patient-Centered Outcomes Research Trust Fund, and Social Security Administration.

^b All of the funds to the Patient-Centered Outcomes Research Institute come directly from the Patient-Centered Outcomes Research Trust Fund, managed by the Department of the Treasury.

Note(s):

Details may not add to total because of rounding.

Source(s):

National Center for Science and Engineering Statistics, Survey of Federal Science and Engineering Support to Universities, Colleges, and Nonprofit Institutions, FY 2019.

In FY 2019, the Patient-Centered Outcomes Research Institute (PCORI) was the single largest recipient of federal funds for R&D with \$578 million; it was closely followed by the Massachusetts General Hospital with \$516 million and by the Henry M. Jackson Foundation for the Advancement of Military Medicine with \$368 million in federal R&D obligations ([figure 3](#)). These three institutions alone constitute 18% of all federal R&D obligations to nonprofits in FY 2019. However, these three institutions have not always been ranked first, second, and third in receipts from federal agencies. For example, in FY 2017 and FY 2018, the Henry M. Jackson Foundation for the Advancement of Military Medicine ranked 27th (\$48 million) and 7th (\$223 million), respectively. Similarly, while PCORI has ranked as the single largest recipient since FY 2017, it had ranked 13th (\$115 million) and 7th (\$152 million) in FY 2016 and FY 2015, respectively.

Data Sources, Limitations, and Availability

The survey population is derived from the federal agencies identified in the [Survey of Federal Funds for Research and Development](#) as providing R&D and R&D plant obligations to academic or nonprofit organizations. The [Federal S&E Support Survey](#) provides information on federal agency obligations for R&D to individually identified nonprofit institutions, an advantage that is not available from other statistical surveys. For the FY 2019 survey, data were obtained from the 20 agencies (12 federal departments, and 8 independent agencies) that made S&E obligations to academic and nonprofit institutions in FY 2019, as reported to the Federal S&E Support Survey. The survey collects federal S&E support data by funding agency, individually named institution, type of activity, type of institution, and geographic location. For individually named nonprofit institutions, agencies report obligations for R&D and R&D plant only; no other data on S&E support are collected.

The full set of data tables on the FY 2019 Federal S&E Support Survey is available at <https://www.nsf.gov/statistics/srvyfedsupport/>. Data for the survey are available in NCSES's interactive data tool (<https://ncesdata.nsf.gov/ids/fss>). For more information, please contact the author.

Figure 3

Federal obligations for research and development and R&D plant to selected nonprofit institutions receiving the largest amounts, ranked by total amount obligated in FY 2019: FYs 2011–19

Millions of current dollars



Source(s):

National Center for Science and Engineering Statistics, Survey of Federal Science and Engineering Support to Universities, Colleges, and Nonprofit Institutions.

Notes

- 1 Nonprofit institutions are defined as private organizations, other than educational institutions, whose net earnings in no part inure to the benefit of a private stockholder or individual and other private organizations organized for the exclusive purpose of turning over their entire net earnings to such nonprofit organizations.
- 2 PCORTF was established in 2010 as part of the Patient Protection and Affordable Care Act of 2010 and reauthorized through the Further Consolidated Appropriations Act of 2020. PCORTF is funded by fees on issuers of health insurance policies and plan sponsors of applicable self-insured health plans and by funds dedicated to PCORI that were also established under the same legislation as PCORTF.
- 3 Review of each of the organizations indicate that the SRI International, Research Triangle Institute, National Center for Manufacturing Sciences, Inc., and the Logistics Management Institute do not conduct research activities in the biological and medical sciences.

Suggested Citation

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